LASH FIRE

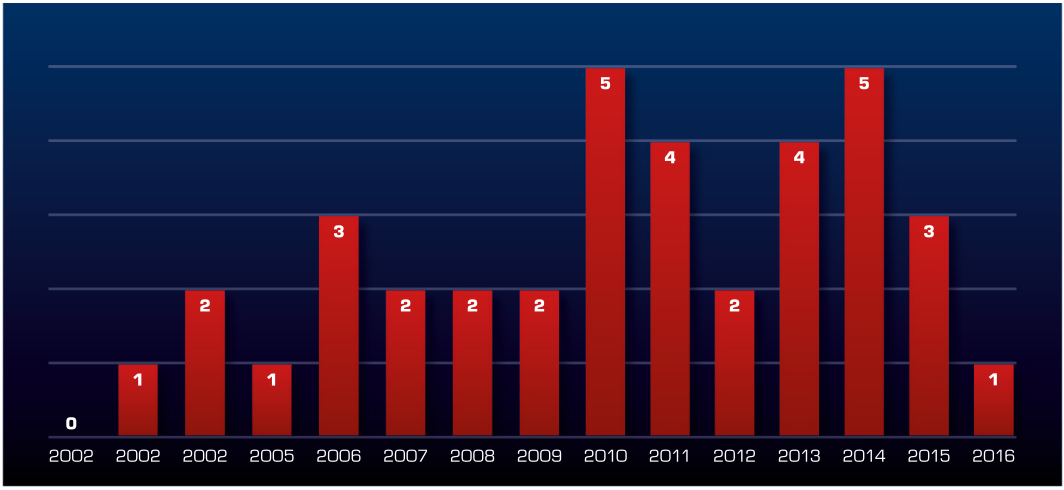
Legislative Assessment for Safety Hazards of Fire and Innovations in Ro-Ro Ship Environment

Enhancing fire prevention and ensuring independent management of fires on ro-ro ships in current and future fire safety challenges

The challenge - why LASH FIRE?

There has been a large number of significant ro-ro ship fires in recent years, establishing a trend which shows no signs of diminishing. This has led to a call for improved prevention and management of fires on ro-ro ships.

Ro-ro space fires (ro-pax)



Source: Leroux et al. (2018). FIRESAFE II Detection and decision. Lisbon: EMSA

Approach

LASH FIRE aims to provide a recognized technical basis for the revision of international IMO regulations, which greatly enhances fire prevention and ensures independent management of fires on ro-ro ships in current and future fire safety challenges.

"LASH FIRE will significantly reduce the occurrence of fires on ro-pax ships, ro-ro cargo ships and vehicle carriers; we will increase the proportion of fires detected and controlled at an early stage, and we will improve the independent fire management capabilities on board."

Franz Evegren, Coordinator of the LASH FIRE project

The potential risk reduction offered by the developed solutions will be balanced against effects on the environment, cost and crew operations to ensure that the fire protection on ro-ro ships is robustly enhanced from a sustainable, practical and long-term perspective.

Developing and demonstrating innovative technology for effective fire protection on ro-ro ships

Effective Manual Operations:
Manual screening and guidelines for effective fire patrol procedures, quick fire confirmation, evaluation of new equipment, and development of a new training module for firefighting involving Alternatively Powered Vehicles (APV).

Inherently Safe Design:
Redesign, development and validation for efficient extinguishing system activation and inherently safe design.

Ignition Prevention:
Significant reduction of the most probable ignition sources and improved management of fire hazards in ro-ro spaces.

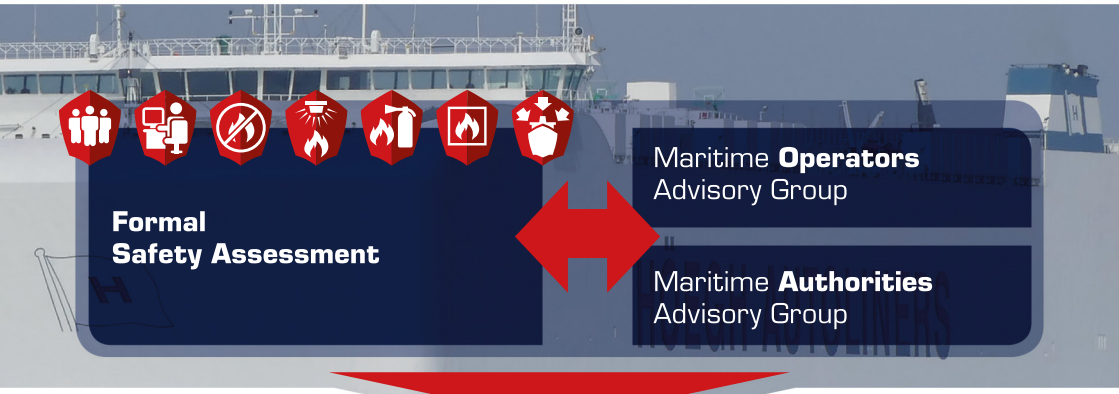
Detection:
Development, evaluation, and demonstration of quicker and more reliable fire detection by new and advancing technologies.

Extinguishment:
Development and demonstration of solutions which are less crew dependent, more effective and harmonized.

Containment:
Eliminate significant containment weaknesses, considering smoke, fire and heat integrity.

Ship Integration:
To facilitate evaluation and demonstration of effective, safe operational and design solutions developed in the project

Propose guidelines and recommendations for rule-making and facilitate international cooperation



Proposals to IMO

The project consortium

26 partners from 13 EU countries aim to develop and demonstrate 20 new procedures and technical innovations to strengthen the independent fire protection of ro-ro ships.

Sept 2019 – Aug 2023

26 partners
13 EU countries

Budget: EUR 13.5 M
Funding: EUR 12.2 M

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